

SEQUENCE LISTING

<110> SPECHT, THOMAS
HINZMANN, BERND
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PILARSKY, CHRISTIAN
DAHL, EDGAR
ROSENTHAL, ANDRE

<120> HUMAN NUCLEIC ACID SEQUENCES FROM HYSTEROMYOMIC TISSUE

<130> ALBRE 4

<140> 09/673,400

<141> 2000-10-17

<150> PCT/DE99/01178

<151> 1999-04-14

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<170> PatentIn Ver. 2.1

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<212> DNA

<213> Homo sapiens

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<211> 1769

<212> DNA

<213> Homo sapiens

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<211> 1026
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 <211> 676
 <212> DNA
 <213> Homo sapiens

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 <211> 1254
 <212> DNA
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<210> 16

<211> 537

<212> DNA

<213> Homo sapiens

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<210> 17

<211> 823

<212> DNA

<213> Homo sapiens

<400> 17

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<211> 1082

<212> DNA

<213> Homo sapiens

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<210> 19

<211> 1548

<212> DNA

<213> Homo sapiens

<400> 19

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 <211> 844
 <212> DNA
 <213> Homo sapiens

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 <212> DNA
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<210> 22
 <211> 546
 <212> DNA
 <213> Homo sapiens

<400> 22
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aagaaggaac gtccagattt ctaaataaaa tgtttcacta taacgctgct ttagaatgaa 420
gggtcttcag aagccacatc cgcacaattt tccacttaac caggaaatat ttctcctctt 480
aatgaatga aatcaatggg ggggggcgct attggaagcc ctattggggg tcaagtgttg 540
aataaa 546

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<210> 23

<211> 1591

<212> DNA

<213> Homo sapiens

<400> 23

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tcgagaagca gctgcagaag gacaagcagg tctaccgggc caccgaccgc ctgctgctgc 180
tgggtgctgg agaattctgg aaaagcacca ttgtgaagca gatgaggatc ctgcatgtta 240
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aagaggcgat tgaaaccatt gtggccgcca tgagcaacct ggtgcccccc gtggagctgg 360
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acaagatcga cgtgatcaag caggctgact atgtgccgag cgatcaggac ctgcttcgct 600
gccgtgtcct gacttctgga atctttgaga ccaagttcca ggtggacaaa gtcaacttcc 660
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ggcaaaaggg gaaagaagaa aagggggggg g 1591

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<210> 24

<211> 441

<212> DNA

<213> Homo sapiens

<400> 24

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aacagctgag gaagctcttc attggagggt tgagctttga aacaactgat gagagcctga 180
ggagccattt tgagcaatgg ggaacgctca cggactgtgt ggtaatgaga gatccaaaca 240
ccaagcgctc caggggcttt gggtttgtca catatgccac tgtggaggag gtggatgcag 300
ctatgaatgc aagggcacac aaggtggatg gaagagttgt ggaaccaaag agagctgttt 360
cagagaagat ttgaaaagcc aggtgccact tacctgtgaa aaggtatttg ttggtggatt 420
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<210> 25

<211> 1131
 <212> DNA
 <213> Homo sapiens

<400> 25

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cccgcgcgcc gctgcatccc gcgtccagca cctacgtccc gctgccgtcg ccgccgccac 180
catgccccaa agaaaggctg aaggggatgc taaggagat aaagcaaagg tgaaggacga 240
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gcctaaaaaag gccctgcaa agaagggaga gaaggtagcc aaagggaaaa agggaaaagc 360
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acagaaagct gaaggtgctg gagatgccaa gtgaagtgtg tgcatttttg ataaactgtg 480
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attttgtttt actttttttt tttttttaa agctatgttg ttagcacaca gaacacttca 600
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<210> 26
 <211> 1071
 <212> DNA
 <213> Homo sapiens

<400> 26

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gtaccctcaa agacagagac accaagaaga atcggaacat acaggctttg atatcaaagg 60
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agtgttggtt cctgcaacga tcacgaacat gaacatcaaa ggatcgccat ggaaagggtc 180
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tgccaccccc gaagacaagg agcaagccca acagatgaat caaaaagact ttctgagcct 480
gatagtcagc atattgcat cctggaatga gcctctgtat catctggtca cggaggtacg 540
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caaacggctt ctagagggca tggagctgat agtcagccag gttcatcctg aaaccaaaga 660
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gactccttag agacatcaaa atctaaaaaa acttaatggg ccgggcgcag tggctcatgg 1020
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<210> 27
 <211> 896
 <212> DNA
 <213> Homo sapiens

<400> 27

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tcctcctcac cctcctcgcc ctgctggcgc tcacctccgc ggtcgccaaa aagaaagata 180
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gcatccggtg cagggtgccc tgcaactgga agaaggagtt tggagccgac tgcaagtaca 360
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tgaagaaggc gcgctacaat gctcagtgcc aggagaccat ccgcgtcacc aagccctgca 480
cccccaagac caaagcaaag gccaaagcca agaaaggga gggaaaggac tagacgcca 540
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<210> 28

<211> 1050

<212> DNA

<213> Homo sapiens

<400> 28

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ccattcctac caaaggaaga aaggctggtc tctccacccc ctgtaggaaa ggcctgcctt 180
gtaagacacc acaattcggc tgaatctgaa gtcttgtgtt ttactaatgg aaaaaaaaaa 240
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ctgccagggt tccagccagc tgggcacact tccccatgtt tgtcagtga ctggaaggcc 420
tgaactagtc tcaaagtctc atccacagag cggccaacag ggaggtcatt tacagtgatc 480
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<210> 29

<211> 581

<212> DNA

<213> Homo sapiens

<400> 29

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aaaagaaggc acggaaggct atgtccaaac tgggtcttcg gcaggttaca ggaagtacta 360
gagtcactat ccggaatct aagaatatcc tctttgtcat cacaaaacca gttgtctaca 420
agagccctgc ttcagatacg tacatagttt ttggggaagc cagatcgaag attatcccag 480
caagcacaac tagcagctgc tgagaagtca agttcagggt aactgtctca acgttcaggga 540

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aacccccggc ttccactgta gagggggagt aaggggaggg t

581

<210> 30

<211> 264

<212> DNA

<213> Homo sapiens

<400> 30

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 tgggaacaat atggaaaact gggagctgcc ctccagtttct cccaagtgtg gactcacttt 120
 cggggtgtcc caaaagcctg attccagggc ctgctagccc gaccccggtg acgcctccac 180
 ccgcgcctgg ccccgacctt caccgcgat cgccgcctc cggggcacac cctccgccag 240
 aaaacagccg gcgggcggcg agac 264

<210> 31

<211> 111

<212> DNA

<213> Homo sapiens

<400> 31

cggcgaatca cttataaatg gcgccgaagc aggagcccga aggctaaatt gcaggagggg 60
 tgagcgaatg ctgtgctttc atgggcctct tacgttgatg aggcaaagta t 111

<210> 32

<211> 76

<212> PRT

<213> Homo sapiens

<400> 32

Pro Phe Cys Glu Glu Thr Lys Thr Glu Arg Leu Trp Pro Arg Cys Arg
 1 5 10 15

Pro Pro Ala Ala Val Gly Phe Ser Thr Gln Asn Pro Gly Val Gly Asp
 20 25 30

Ser Glu Ser Asn Leu Phe Ser Leu Pro Phe Leu Gly Ser Lys Ala Asn
 35 40 45

Pro Ile Pro Thr His Trp Ser Ser Ala Leu Ile Phe Asn Leu Pro Ser
 50 55 60

Pro Pro Phe Gln Asn Thr His Ile Pro Phe Gln Asn
 65 70 75

<210> 33

<211> 72

<212> PRT

<213> Homo sapiens

<400> 33

Ser Ser Phe Leu Phe Ser Phe Gln Thr Gln Phe His Lys Asn Arg Lys
 1 5 10 15

Asp Lys Val Phe Ser Ser Arg Gln Ala Lys Pro Phe Pro His His Gln
 20 25 30

Ser Ile Leu Lys Ile His Glu Glu Val Glu Arg Ser Val Ser Gly Arg
 35 40 45

Leu Lys Gly Ser Ser Ser Ser Asn Pro Thr Ala Ala Glu Lys Ile Glu
 50 55 60

Ile Glu Ile Leu Lys Ile Thr Ser
 65 70

<210> 34

<211> 70

<212> PRT

<213> Homo sapiens

<400> 34

Lys Lys Leu Asp Tyr Phe Cys Ala Glu Ile Lys Asn Ser His Cys Lys
 1 5 10 15

Thr Lys Ile Lys Ile Ala Gln Ile Arg Lys Pro Gly Gly Ala Lys Cys
 20 25 30

Gln Val Ser Lys Val His Phe Phe Ser Leu Ser Lys Arg Ser Ser Thr
 35 40 45

Lys Thr Ala Arg Ile Lys Phe Ser Val Ala Asp Lys Gln Ser Pro Phe
 50 55 60

His Ile Ile Asn Gln Ser
 65 70

<210> 35

<211> 60

<212> PRT

<213> Homo sapiens

<400> 35

Ser Ser Gly Pro Ala Pro Gly Cys Ser Pro Phe Ala Gly Thr Arg Lys
 1 5 10 15

Asn Phe Pro Ser Met Val Val Leu Glu Arg Thr Phe Leu Lys Ile Asn
 20 25 30

Tyr Ile Phe Leu Cys Ile Pro Met Glu Phe Gln Phe Ile Arg Cys Ser
 35 40 45

Pro Trp Pro Pro Gln Asn Thr Glu Val Ile Pro Ala
 50 55 60

<210> 36

<211> 63

<212> PRT

<213> Homo sapiens

<400> 36

Ala Ser Gly Val His Thr Glu Thr His Arg Tyr Asn Leu Leu Ser Ala
 1 5 10 15

Lys Ser Arg Lys Lys Gly Trp Gly Tyr Leu Gly Trp Leu Gly Phe Asp
 20 25 30

Phe Leu Leu Val Cys Leu Phe Cys Thr Lys Thr Val Leu Ser Phe Glu
 35 40 45

Tyr Arg Arg Asp Ile Ser Ile Tyr Met Leu Ser Asn Gln Asp Gly
 50 55 60

<210> 37

<211> 170

<212> PRT

<213> Homo sapiens

<400> 37

Ala Arg Ala Ala Arg Ala Ala Gln Thr Pro His Leu Thr Leu Pro Ala
 1 5 10 15

Asp Leu Gln Thr Leu His Leu Asn Arg Pro Thr Leu Ser Pro Glu Ser
 20 25 30

Lys Leu Glu Trp Asn Asn Asp Ile Pro Glu Val Asn His Leu Asn Ser
 35 40 45

Glu His Trp Arg Lys Thr Glu Lys Trp Thr Gly His Glu Glu Thr Asn
 50 55 60

His Leu Glu Thr Asp Phe Ser Gly Asp Gly Met Thr Glu Leu Glu Leu
 65 70 75 80

Gly Pro Ser Pro Arg Leu Gln Pro Ile Arg Arg His Pro Lys Glu Leu
 85 90 95

Pro Gln Tyr Gly Gly Pro Gly Lys Asp Ile Phe Glu Asp Gln Leu Tyr
 100 105 110

Leu Pro Val His Ser Asp Gly Ile Ser Val His Gln Met Phe Thr Met
 115 120 125

Ala Thr Ala Glu His Arg Ser Asn Ser Ser Ile Ala Gly Lys Met Leu
 130 135 140

Thr Lys Val Glu Lys Asn His Glu Lys Glu Lys Ser Gln His Leu Glu
 145 150 155 160

Gly Ser Ala Ser Ser Ser Leu Ser Ser Asp
 165 170

<210> 38

<211> 144

<212> PRT

<213> Homo sapiens

<400> 38

Ala Arg Ala Pro Thr Leu Asp Met Arg Phe Arg Arg Arg Leu Ser Ala
 1 5 10 15
 Asp Pro His Ala Thr Gln Arg Asn Ser Ala Glu Ala Arg Gly Thr Met
 20 25 30
 Asp Gly Arg Val Gln Leu Met Lys Ala Leu Leu Ala Gly Pro Leu Arg
 35 40 45
 Pro Ala Ala Arg Arg Trp Arg Asn Pro Ile Pro Phe Pro Glu Thr Phe
 50 55 60
 Asp Gly Asp Thr Asp Arg Leu Pro Glu Phe Ile Val Gln Thr Cys Ser
 65 70 75 80
 Tyr Met Phe Val Asp Glu Asn Thr Phe Ser Asn Asp Ala Leu Lys Val
 85 90 95
 Thr Phe Leu Ile Thr Arg Leu Thr Gly Pro Ala Leu Gln Trp Val Ile
 100 105 110
 Pro Tyr Ile Arg Lys Glu Ser Pro Leu Leu Asn Asp Tyr Arg Gly Phe
 115 120 125
 Leu Ala Glu Met Lys Arg Val Phe Gly Trp Glu Glu Asp Glu Asp Phe
 130 135 140

<210> 39

<211> 178

<212> PRT

<213> Homo sapiens

<400> 39

His Ser Leu Gly Arg Ala Pro Val Glu Thr Leu Ala Val Ala Thr Gly
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 Thr Ala Asn Ser Ser Gln Ser Thr Arg Pro Gln Ala Arg Gly Ser Pro
 20 25 30
 Gly Leu Glu Val Leu Val Leu Leu Pro Ser Lys Asp Ser Leu His Leu
 35 40 45
 Gly Gln Lys Ala Pro Val Ile Ile Glu Gln Gly Ala Leu Leu Pro Asp
 50 55 60
 Val Gly Asp His Pro Leu Gln Gly Trp Pro Arg Glu Ala Gly Asp Glu
 65 70 75 80
 Glu Arg His Leu Gln Gly Val Val Gly Glu Arg Val Leu Val His Glu
 85 90 95
 His Val Gly Ala Arg Leu His Asp Glu Leu Arg Glu Ser Val Gly Ile
 100 105 110

Ser Val Lys Arg Leu Gly Lys Gly Asn Arg Val Pro Pro Ala Thr Arg
 115 120 125

Arg Gly Pro Glu Gly Pro Gly Gln Glu Gly Leu His Gln Leu His Pro
 130 135 140

Thr Val His Arg Ala Ala Arg Leu Arg Gly Val Ser Leu Gly Cys Val
 145 150 155 160

Gly Val Ser Ala Lys Ala Ser Pro Glu Ala His Val Glu Gly Gly Gly
 165 170 175

Pro Gly

<210> 40

<211> 89

<212> PRT

<213> Homo sapiens

<400> 40

Lys Leu Thr Gly Ile Asn Thr Gly Cys Arg Asn Met Leu Ala Leu Cys
 1 5 10 15

Ile Arg Gly His Ala Gln Gln Ile Gln Glu Ile Tyr Leu Ala Thr Phe
 20 25 30

Ser Arg Lys Gly Thr Leu Gly Ile Ile His Tyr Ile Leu Glu Val Phe
 35 40 45

Leu Gly Phe Phe Phe Phe Phe Leu Arg Gln Ser Cys Cys Ile Ala Gln
 50 55 60

Ala Gly Ser Val Val Ala Gln Ser Gln Leu Ile Ala Ser Ser Ile Thr
 65 70 75 80

Gln Gly Leu Ser Asn Pro Pro Thr Leu
 85

<210> 41

<211> 95

<212> PRT

<213> Homo sapiens

<400> 41

Ile Val Thr Trp Arg Lys Val Pro Met Ser Leu Cys Gln Arg Pro Pro
 1 5 10 15

Pro Phe Val Arg Ile Gly Ile Phe Arg Leu Leu Lys Gly Leu Ala His
 20 25 30

Ile Arg Cys Asp Leu Phe Ile Pro Val Val Met Glu Gly His Ile Cys
 35 40 45

Gln Ser Leu Glu Ser Ala Lys Ala Gly Thr Arg Phe Pro Gly Pro Gln
 50 55 60

Trp Gly Cys Ala Asn Pro Arg Glu Leu Gly Cys Lys Phe Val Lys Asn
65 70 75 80

Gln His His Val Trp Gln Leu Ser Ile Gly Ala Arg Ser Leu Pro
85 90 95

<210> 42

<211> 154

<212> PRT

<213> Homo sapiens

<400> 42

Cys Gln Leu Val Phe Arg Ile Gln Thr Asp Gly Ser Tyr Trp Ser Leu
1 5 10 15

Gly Leu Thr Ser Ser Gly Asn Ile Thr Phe Ser Trp Ala Glu Met Leu
20 25 30

Leu Pro Ala Leu Lys Gln His Ser Val Leu Lys Thr Ser Trp Gln Ala
35 40 45

Pro Gly Ser Asn Thr Gln Leu Pro Asn Met Met Leu Ile Leu His Glu
50 55 60

Phe Ala Thr Gln Phe Ser Arg Val Cys Thr Pro Pro Leu Trp Ala Gly
65 70 75 80

Glu Pro Gly Pro Gly Leu Arg Arg Leu Gln Ala Leu Ala Asp Val Ala
85 90 95

Leu His Asn Asn Gly Asn Glu Lys Val Thr Pro Tyr Val Arg Gln Ala
100 105 110

Leu Lys Glu Ser Glu Tyr Pro Asn Pro His Lys Arg Arg Gly Thr Leu
115 120 125

Ala Lys Thr His Gly Asn Phe Pro Pro Ser Asn Asp Leu Asp Arg Arg
130 135 140

Ala Thr Gln Asp Ser Pro Ser Cys Ser Val
145 150

<210> 43

<211> 79

<212> PRT

<213> Homo sapiens

<400> 43

Leu Ala Ser Thr Leu Gly Val Glu Thr Cys Leu Pro Tyr Val Ser Glu
1 5 10 15

Asp Met Leu Ser Arg Ser Lys Arg Tyr Ile Trp Gln Leu Phe Leu Glu
20 25 30

Lys Ala His Trp Val Ser Phe Ile Thr Phe Leu Ser Phe Phe Gly Phe
 35 40 45

Phe Phe Phe Phe Phe Glu Thr Val Leu Leu Tyr Cys Pro Gly Trp Ser
 50 55 60

Val Val Ala Gln Ser Gln Leu Ile Ala Ser Ser Ile Thr Gln Ala
 65 70 75

<210> 44

<211> 82

<212> PRT

<213> Homo sapiens

<400> 44

Cys Gln Leu Val Phe Arg Ile Gln Thr Asp Gly Ser Tyr Trp Ser Leu
 1 5 10 15

Gly Leu Thr Ser Ser Gly Asn Ile Thr Phe Ser Trp Ala Glu Met Leu
 20 25 30

Leu Pro Ala Leu Lys Gln His Ser Val Leu Lys Thr Ser Trp Gln Ala
 35 40 45

Pro Gly Ser Asn Thr Gln Leu Pro Asn Met Met Leu Ile Leu His Glu
 50 55 60

Phe Ala Thr Ser Trp Leu Pro Arg Leu Gln His Ser Ala Val Gly Thr
 65 70 75 80

Gln Ser

<210> 45

<211> 68

<212> PRT

<213> Homo sapiens

<400> 45

Arg Gly Ser Lys Asp Arg Asn Ser Gly Gln Gly Ser Gly Ser Tyr Gly
 1 5 10 15

Gln Leu Ser Cys Arg Gly Phe Ser Asp Gln Phe Ser Arg Val Cys Thr
 20 25 30

Pro Pro Leu Trp Ala Gly Glu Pro Gly Pro Gly Leu Arg Arg Leu Gln
 35 40 45

Ala Leu Ala Asp Val Ala Leu His Asn Asn Gly Asn Glu Lys Val Thr
 50 55 60

Pro Tyr Val Arg
 65

<210> 46
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 46
 Asp Tyr Val Val Ser Leu Arg Lys Lys Phe Val Trp Gly Leu Trp Ala
 1 5 10 15
 Val Asn Ala Leu Gly Thr Ile Trp Lys Thr Gly Ser Cys Pro Gln Phe
 20 25 30
 Leu Pro Lys Leu Asp Ser Leu Ser Gly Cys Pro Lys Ser Leu Ile Pro
 35 40 45
 Gly Pro Ala Ser Pro Thr Pro Val Thr Pro Pro Pro Ala Pro Gly Pro
 50 55 60
 Ser Leu His Pro Arg Ser Pro Pro Ser Gly Ala His Pro Pro Pro Glu
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 <211> 51
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 <213> Homo sapiens

<400> 47
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<400> 48
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<210> 49
 <211> 36
 <212> PRT
 <213> Homo sapiens

<400> 49
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 Ala Ser Ala Pro Phe Ile Ser Asp Ser Pro
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<210> 51
 <211> 25
 <212> PRT
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<212> PRT
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<400> 53

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 35 40 45
 Gly Lys Ile Val Gly Cys Ser Val His Lys Gly Phe Ala Phe Val Gln
 50 55 60
 Tyr Val Asn Glu Arg Asn Ala Arg Ala Ala Val Ala Gly Glu Asp Gly
 65 70 75 80
 Arg Met Ile Ala Gly Gln Val Leu Asp Ile Asn Leu Ala Ala Glu Pro
 85 90 95
 Lys Val Asn Arg Gly Lys Ala Gly Val Lys Arg Ser Ala Ala Glu Met
 100 105 110
 Tyr Gly Ser Ser Phe Asp Leu Asp Tyr Asp Phe Gln Arg Asp Tyr Tyr
 115 120 125
 Asp Arg Met Tyr Ser Tyr Pro Ala Arg Val Pro Pro Pro Pro Ile
 130 135 140
 Ala Arg Ala Val Val Pro Ser Lys Arg Gln Arg Val Ser Gly Asn Thr
 145 150 155 160
 Ser Arg Arg Gly Lys Ser Gly Phe Asn Ser Lys Ser Gly Gln Arg Gly
 165 170 175
 Ser Ser Lys Ser Gly Lys Leu Lys Gly Asp Asp Leu Gln Ala Ile Lys
 180 185 190
 Lys Glu Leu Thr Gln Ile Lys Gln Lys Val Asp Ser Leu Leu Glu Asn
 195 200 205
 Leu Glu Lys Ile Glu Lys Glu Gln Ser Lys Gln Ala Val Glu Met Lys
 210 215 220
 Asn Asp Lys Ser Glu Glu Glu Gln Ser Ser Ser Ser Val Lys Lys Asp
 225 230 235 240
 Glu Thr Asn Val Lys Met Glu Ser Glu Gly Gly Ala Asp Asp Ser Ala
 245 250 255
 Glu Glu Gly Asp Leu Leu Asp Asp Asp Asp Asn Glu Asp Arg Gly Asp
 260 265 270
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 Glu Asp Asp Arg Asp Lys Ala Asn Gly Glu Asp Asp Ser
 290 295 300

<210> 54
 <211> 112
 <212> PRT
 <213> Homo sapiens

<400> 54

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 1 5 10 15

Ala Ser Phe Ser Ser Ser Leu Ile Asn Ser Ser Trp Ser Ser Pro Arg
 20 25 30

Ser Ser Leu Ser Ser Ser Ser Ser Arg Ser Pro Ser Ser Ala Glu Ser
 35 40 45

Ser Ala Pro Pro Ser Asp Ser Ile Phe Thr Leu Val Ser Ser Phe Phe
 50 55 60

Thr Glu Leu Leu Leu Cys Ser Ser Ser Asp Leu Ser Phe Phe Ile Ser
 65 70 75 80

Thr Ala Cys Leu Leu Cys Ser Phe Ser Ile Phe Ser Arg Phe Ser Arg
 85 90 95

Arg Glu Ser Thr Phe Cys Phe Ile Trp Val Ser Ser Phe Leu Met Ala
 100 105 110

<210> 55
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 55

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 1 5 10 15

Phe Ile Ile Val Tyr Phe Lys Leu Cys Phe Thr Ala Ser Ser Thr Lys
 20 25 30

Pro Leu Glu Cys Thr Arg Tyr Ile Phe Leu Gly Val Ile Ile Met Met
 35 40 45

His Thr Asn Thr Thr Leu Leu Lys Leu Tyr Phe Ile Glu Met His Val
 50 55 60

Ala Leu Arg Ser Gln Leu Asp Ile Glu Trp Arg Leu Phe Gln Asn Gly
 65 70 75 80

Phe Tyr Ile Leu Met Lys Val Trp Glu Val Tyr Pro Leu Cys Leu Phe
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Ile Ser Ala Leu Trp Ser Ser Trp His Pro Phe
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sequence e.g., EST or contig. S

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<210> 57
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<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence: Consensus
sequence C

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29